



Public Works Commission

Application for Financial Assistance

IMPORTANT: Please consult "Instructions for Financial Assistance for Capital Infrastructure Projects" for guidance in completion of this form.

Applicant: Montgomery County Subdivision Code: 113-00113

District Number: 4 **County:** Montgomery **Date:** 08/22/2022

Contact: Rick Splawinski **Phone:** 937-496-6510
(The individual who will be available during business hours and who can best answer or coordinate the response to questions)

Email: splawinski@mcohio.org **FAX:** _____

Project Name: Wagner Ford Road, MOT-CR218-1.00 LTIP **Zip Code:** 45414

Subdivision Type	Project Type	Funding Request Summary	
County _____	(Select single largest component by \$)	(Automatically populates from page 2)	
	1. Road	Total Project Cost:	<u>1,022,000</u> .00
	x 2. Bridge/Culvert	1. Grant:	<u>200,000</u> .00
	3. Water Supply	2. Loan:	<u>0</u> .00
	4. Wastewater	3. Loan Assistance/ Credit Enhancement:	<u>0</u> .00
	5. Solid Waste		
	6. Stormwater	Funding Requested:	<u>200,000</u> .00

District Recommendation (To be completed by the District Committee)

<u>Funding Type Requested</u> <small>(Select one)</small>	SCIP Loan - Rate: _____ % Term: _____ Yrs	Amount: _____ .00
<input type="checkbox"/> State Capital Improvement Program	RLP Loan - Rate: _____ % Term: _____ Yrs	Amount: _____ .00
<input type="checkbox"/> Local Transportation Improvement Program	Grant:	Amount: _____ .00
<input type="checkbox"/> Revolving Loan Program	LTIP:	Amount: _____ .00
<input type="checkbox"/> Small Government Program	Loan Assistance / Credit Enhancement:	Amount: _____ .00
District SG Priority: _____		

For OPWC Use Only

<u>STATUS</u>	Grant Amount: _____ .00	Loan Type: <input type="checkbox"/> SCIP <input type="checkbox"/> RLP
Project Number: _____	Loan Amount: _____ .00	Date Construction End: _____
_____	Total Funding: _____ .00	Date Maturity: _____
Release Date: _____	Local Participation: _____ %	Rate: _____ %
OPWC Approval: _____	OPWC Participation: _____ %	Term: _____ Yrs

1.0 Project Financial Information (All Costs Rounded to Nearest Dollar)

1.1 Project Estimated Costs

Engineering Services

Preliminary / Final Design:	<u>60,000</u>	.00	
Construction Administration:	<u>20,100</u>	.00	
Total Engineering Services:	a.) <u>80,100</u>	.00	<u>10</u> %
Right of Way:	b.) <u>0</u>	.00	
Construction:	c.) <u>801,270</u>	.00	
Permits, Advertising, Legal:	e.) <u>60,500</u>	.00	
Construction Contingencies:	f.) <u>80,130</u>	.00	
Total Estimated Costs:	g.) <u>1,022,000</u>	.00	

1.2 Project Financial Resources

Local Resources

Local In-Kind or Force Account:	a.) <u>0</u>	.00	
Local Revenues:	b.) <u>822,000</u>	.00	
Other Public Revenues:			
Local / ODOT - Let: _____	d.) <u>0</u>	.00	
ODOT PID: _____			
OEPA / OWDA:	e.) <u>0</u>	.00	
CDBG:	f.) _____	.00	
Other: _____	g.) <u>0</u>	.00	
Subtotal Local Resources:	i.) <u>822,000</u>	.00	<u>80.4</u> %

OPWC Funds (Check all requested and enter Amount)

Grant: <u>100</u> % of OPWC Funds	j.) <u>200,000</u>	.00	
Loan: <u>0</u> % of OPWC Funds	k.) <u>0</u>	.00	_____ yrs
Loan Assistance / Credit Enhancement:	l.) <u>0</u>	.00	
Subtotal OPWC Funds:	m.) <u>200,000</u>	.00	<u>19.6</u> %
Total Financial Resources:	n.) <u>1,022,000</u>	.00	<u>100</u> %

4.3 Project Description

A: SPECIFIC LOCATION (Supply a written location description that includes the project termini; a map does not replace this requirement.) 2000 character limit.

The Wagner Ford Road bridge rehabilitation project is located in Montgomery County on the boundary between Harrison Township (west side) and The City of Dayton (east side). The bridge carries four lanes of southwest/northeast traffic on Wagner Ford Road, which spans 121' over the CSX Railroad.

B: IDENTIFY THE PROBLEM (Describe the issue to be addressed) 2000 character limit.

The most recent bridge inspection in August 2021 reported a General Appraisal of 5 – Fair, due to the condition of the existing substructure. In addition to the bridge, the condition of the approach roadway needs to be addressed including guardrail and drainage inlet upgrades to extend the service life of the infrastructure and improve safety for the traveling public.

The primary focus of the project is to restore the deteriorated abutment walls, beam seats, and backwalls. Over 40% of the rear and forward abutment faces have deteriorated. Both breastwalls have multiple locations with exposed reinforcing steel, section loss, and debonding. Deterioration with loss of bearing area has occurred at the beam seats on both abutments, including advanced corrosion undermining one bearing and exposing 6" of the anchor rod. The faces of the backwalls exhibit heavy cracking, pop-outs, spalling, and delamination on both abutments. Spalled areas of the backwalls were sounded, revealing delamination along most of the backwall surface area.

Recent inspections of the deck joints indicate that the expansion joint seals are clogged with soil and debris, with vegetation growing in some locations. In addition, the tops of the backwalls at both the rear and forward abutments are heavily spalled and should be replaced.

The existing guardrail was constructed in 1990 to a height of 27" using 1982 ODOT standards. To comply with current MASH TL-3 criteria, the guardrail is required to be 31" high to protect larger and heavier modern vehicles. The general condition of the guardrail ranges from fair to poor, with the worst sections suffering extensive vehicular impact damage and misalignment.

The roadway drainage system was evaluated. The catch basins immediately adjacent to the bridge are in fair condition, however, several drainage inlets at the bottom of the approach embankments are severely damaged and in need of repair or replacement.

C: PROJECT SCOPE (Describe the work to be completed) 2000 character limit.

The purpose of the project is to extend the life of the existing structure by repairing the abutments and preventing future spalling and deterioration of the concrete. Additional work on the approach guardrail and drainage inlets will enhance the functionality of the infrastructure and ensure compliance with current standards.

Repair of the abutment breastwalls, beam seats, and backwalls represents the substructure rehabilitation component of the proposed project. Non-destructive testing will be conducted to determine the extent of the deterioration. Deteriorated concrete will be removed, damaged reinforcing steel will be replaced, and the remaining reinforcing steel will be cleaned. To prevent future deterioration, a galvanic anode corrosion protection system will be installed before patching the concrete surfaces, and all exposed concrete will be sealed with epoxy-urethane sealer.

Superstructure rehabilitation work will include replacement of the strip seal expansion joints. The existing bridge parapets will remain, but to comply with current CSX design guidelines vandal protection fencing will be added. The roadway project scope includes complete replacement of the approach guardrail due to existing guardrail damage and required updates for MASH TL-3 compliance. Guardrail work also includes the construction of 15' long reinforced concrete end sections to transition the barrier height and shape to meet the new bridge terminal assemblies. Damaged drainage inlets will be replaced as necessary.

5.0 Project Officials

Changes in Project Officials must be submitted in writing from an officer of record.

5.1 Chief Executive Officer (Person authorized in legislation to sign project agreements)

Name: Michael B. Colbert
Title: County Administrator
Address: 451 West Third Street

City: Dayton State: OH Zip: 45422
Phone: 937-225-4582
FAX:
E-Mail: colbertm@mcoho.org

5.2 Chief Financial Officer (Can not also serve as CEO)

Name: Ronelle Kinney
Title: Fiscal Officer
Address: 451 West Third Street

City: Dayton State: OH Zip: 45422
Phone: 937-225-4904
FAX:
E-Mail: kinneyr@mcoho.org

5.3 Project Manager

Name: Rick Splawinski
Title: Project Manager
Address: 451 West Third Street

City: Dayton State: OH Zip: 45422
Phone: 937-486-6510
FAX:
E-Mail: splawinski@mcoho.org

6.0 Attachments / Completeness review

Confirm in the boxes below that each item listed is attached (Check each box)

- x A certified copy of the legislation by the governing body of the applicant authorizing a designated official to sign and submit this application and execute contracts. This individual should sign under 7.0, Applicant Certification, below.

- x A certification signed by the applicant's chief financial officer stating the amount of all local share funds required for the project will be available on or before the dates listed in the Project Schedule section. If the application involves a request for loan (RLP or SCIP), a certification signed by the CFO which identifies a specific revenue source for repaying the loan also must be attached. Both certifications can be accomplished in the same letter.

- x A registered professional engineer's detailed cost estimate and useful life statement, as required in 164-1-13, 164-1-14, and 164-1-16 of the Ohio Administrative Code. Estimates shall contain an engineer's seal or stamp and signature.

A cooperative agreement (if the project involves more than one subdivision or district) which identifies the fiscal and administrative responsibilities of each participant.

Farmland Preservation Review - The Governor's Executive Order 98-IV, "Ohio Farmland Protection Policy" requires the Commission to establish guidelines on how it will take protection of productive agricultural and grazing land into account in its funding decision making process. Please include a Farm Land Preservation statement for projects that have an impact on farmland.

Capital Improvements Report. CIR Required by O.R.C. Chapter 164.06 on standard form.

- x Supporting Documentation: Materials such as additional project description, photographs, economic impact (temporary and/or full time jobs likely to be created as a result of the project), accident reports, impact on school zones, and other information to assist your district committee in ranking your project. Be sure to include supplements which may be required by your local District Public Works Integrating Committee.

7.0 Applicant Certification

The undersigned certifies: (1) he/she is legally authorized to request and accept financial assistance from the Ohio Public Works Commission as identified in the attached legislation; (2) to the best of his/her knowledge and belief, all representations that are part of this application are true and correct; (3) all official documents and commitments of the applicant that are part of this application have been duly authorized by the governing body of the applicant; and, (4) should the requested financial assistance be provided, that in the execution of this project, the applicant will comply with all assurances required by Ohio Law, including those involving Buy Ohio and prevailing wages.

Applicant certifies that physical construction on the project as defined in the application has NOT begun, and will not begin until a Project Agreement for this project has been executed with the Ohio Public Works Commission. Action to the contrary will result in termination of the agreement and withdrawal of Ohio Public Works Commission funding from the project.

Certifying Representative (Printed form, Type or Print Name and Title)

Original Signature / Date Signed

**RESOLUTION NO. 22-1243
AUGUST 16, 2022**

RESOLUTION AUTHORIZING THE MONTGOMERY COUNTY ENGINEER'S OFFICE TO PREPARE AND SUBMIT APPLICATIONS TO PARTICIPATE IN THE OHIO PUBLIC WORKS COMMISSION (OPWC) STATE CAPITAL IMPROVEMENT PROGRAM (SCIP) OR THE LOCAL TRANSPORTATION IMPROVEMENT PROGRAM (LTIP), AND TO EXECUTE CONTRACTS AS REQUIRED FOR PROJECT APPLICATIONS TO BE SUBMITTED FOR ROUND 2022-2023 (FISCAL YEAR 2024) AS SHOWN IN ATTACHED EXHIBIT "A".

WHEREAS, the Montgomery County Engineer's Office has been notified that OPWC Program Funds will be available to jurisdictions within the area covered by the District 4 Public Works Integrating Committee for Round 2022-2023 (Fiscal Year 2024); and

WHEREAS, the OPWC's State Capital Improvement Program and the Local Transportation Improvement Program both provide financial assistance to political subdivisions for public infrastructure projects; and

WHEREAS, the Montgomery County Engineer's Office is planning to construct the capital improvements listed in Exhibit "A"; and

WHEREAS, the Montgomery County Engineer's Office commits to funding all local share project costs exceeding the total of the OPWC's grants and/or loans received; and

WHEREAS, the County Administrator is the County's authorized agent to sign the OPWC applications and subsequent contracts for project applications to be submitted for Round 2022-2023 (Fiscal Year 2024); and

WHEREAS, the Montgomery County Engineer's Office is authorized to provide additional information concerning the projects listed in Exhibit "A" and commits to meeting the reporting requirements for OPWC.

NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners of Montgomery County, Ohio, that the resolution authorizing the transmittal of the applications and entering into of any agreements necessary and appropriate for obtaining OPWC funds as described above for the projects listed in Exhibit "A", be and is hereby approved.

BE IT FURTHER RESOLVED that the Clerk shall certify a copy of this resolution to the County Engineer. The County Engineer shall forward a copy of the certified resolution to the OPWC's District 4 Public Works Integrating Committee. The resolution is also available on Montgomery County, Ohio's website at <http://www.mcoho.org>.

GES:th

**RESOLUTION NO: 22-1243
AUGUST 16, 2022**

CERTIFICATE

Ms. Dodge moved the adoption of the foregoing resolution. It was seconded by Mrs. Lieberman, and upon call of the roll the following vote resulted:

Ms. Dodge, aye; Mrs. Lieberman, aye; Mrs. Rice, aye: Carried.



I hereby certify that the foregoing is a true and correct copy of a resolution duly adopted by the Board of County Commissioners of Montgomery County, Ohio, on the 16th day of August, 2022.

THE BOARD OF COUNTY COMMISSIONERS HEREBY FINDS AND DETERMINES THAT ALL FORMAL ACTIONS RELATIVE TO THE ADOPTION OF THIS RESOLUTION WERE TAKEN IN AN OPEN MEETING OF THIS BOARD OF COUNTY COMMISSIONERS, AND THAT ALL DELIBERATIONS OF THIS BOARD OF COUNTY COMMISSIONERS, AND OF ITS COMMITTEES, IF ANY WHICH RESULTED IN FORMAL ACTION, WERE TAKEN IN MEETINGS OPEN TO THE PUBLIC, IN FULL COMPLIANCE WITH APPLICABLE LEGAL REQUIREMENTS, INCLUDING SECTION 121.22 OF THE REVISED CODE.



Emily Bradford, Clerk
Board of County Commissioners
Montgomery County, Ohio



Exhibit A

Ohio Public Works Commission (OPWC) Round 2022-2023 State Capital Improvement Program (SCIP) and Local Transportation Improvement Project (LTIP) Applications

OPWC SCIP Project Application	Job Number	Program Manager	SCIP Project Total Costs	Total SCIP Request	SCIP Grant Request	SCIP Loan Request	MCEO Road A&G	Funds from Other Sources	SCIP Loan Term
Mad River Road Resurfacing (PID 116873)	2022-12	Joe Dura	\$ 874,500	\$ 200,000	\$ 50,000	\$ 150,000	\$ 166,284	\$ 508,216	5-years
Shoup Mill Road Reconstruction (PID 110332)	2018-20	Joe Dura	\$ 5,016,000	\$ 1,500,000	\$ 1,125,000	\$ 375,000	\$ 998,800	\$ 2,517,200	10-years
Taylorville Road	2021-18	Cedric McGhee	\$ 1,330,000	\$ 500,000	\$ 250,000	\$ 250,000	\$ 830,000	\$ -	5-years
Wagner Ford Road (HAR-218-1.00)	2021-09	Rick Splawinski	\$ 1,022,000	\$ 500,000	\$ 125,000	\$ 375,000	\$ 522,000	\$ -	10-years
Wenger Road (CLT-20B-2.06)	2021-17	David Shields	\$ 409,500	\$ 409,500	\$ 102,375	\$ 307,125	\$ -	\$ -	10-years

OPWC LTIP Project Application	Job Number	Program Manager	LTIP Project Total Costs	LTIP Grant Request		MCEO Road A&G	Funds from Other Sources	
Mad River Road Resurfacing (PID 116873)	2022-12	Joe Dura	\$ 874,500	\$ 200,000		\$ 166,284	\$ 508,216	
Shoup Mill Road Reconstruction (PID 110332)	2018-20	Joe Dura	\$ 5,016,000	\$ 1,100,000		\$ 1,398,800	\$ 2,517,200	
Taylorville Road	2021-18	Cedric McGhee	\$ 1,330,000	\$ 332,500		\$ 997,500	\$ -	
Wagner Ford Road (HAR-218-1.00)	2021-09	Rick Splawinski	\$ 1,022,000	\$ 200,000		\$ 822,000	\$ -	
Wenger Road (CLT-20B-2.06)	2021-17	David Shields	\$ 409,500	\$ 195,000		\$ 214,500	\$ -	

**MONTGOMERY COUNTY ENGINEER'S OFFICE
CHIEF FINANCIAL OFFICERS CERTIFICATION**

I, Ronelle Kinney, Comptroller of the Montgomery County Engineer's Office, hereby certify that the Montgomery County Engineer's Office will have the amount of \$822,000.00 available in the Road A&G Fund as specified below. This amount will be added to the LTIP grant amount of \$200,000.00 requested for the Wagner Ford Road, MOT-CR218-1.00, Bridge Rehabilitation Project.

2022-2023

Project Name: Wagner Ford Road, MOT-CR218-1.00, Bridge Rehabilitation Project

Grant Amount:	\$200,000.00
Road A&G:	\$822,000.00
Total:	\$1,022,000.00

These funds will be available for use on July 1, 2023, immediately after formal project approval.



Ronelle Kinney, Comptroller
Montgomery County Engineer's Office

Date: 8/8/22

Wagner Ford Road, MOT-CR218-1.00, Bridge Rehabilitation

ENGINEER'S ESTIMATE

REF NO.	ITEM	ITEM EXT	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE
ROADWAY							
1	201	11000	CLEARING AND GRUBBING	LS	1	\$ 19,363.50	\$ 19,363.50
2	202	38000	GUARDRAIL REMOVED	FT	1923	\$ 2.54	\$ 4,889.06
3	503	21300	UNCLASSIFIED EXCAVATION	LS	1	\$ 6,454.50	\$ 6,454.50
4	606	15050	GUARDRAIL, TYPE MGS	FT	1923	\$ 26.13	\$ 50,230.73
5	606	26150	ANCHOR ASSEMBLY, MGS TYPE E, MASH 2019	EACH	2	\$ 3,527.97	\$ 7,055.93
6	606	35002	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	EACH	2	\$ 3,148.70	\$ 6,297.40
7	606	35102	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 2	EACH	2	\$ 697.25	\$ 1,394.50
8	626	00110	BARRIER REFLECTOR, TYPE 2	EACH	30	\$ 11.70	\$ 350.87
EROSION CONTROL							
9	659	00300	TOPSOIL	CY	113	\$ 65.58	\$ 7,415.95
10	659	00500	SEEDING AND MULCHING, CLASS 1	SY	1018	\$ 1.98	\$ 2,010.19
11	659	20000	COMMERCIAL FERTILIZER	TON	0.092	\$ 891.90	\$ 81.70
12	659	35000	WATER	MGAL	2.75	\$ 2.40	\$ 6.60
13	832	30000	EROSION CONTROL	EACH	5000	\$ 1.29	\$ 6,454.50
DRAINAGE							
14	202	58100	CATCH BASIN REMOVED	EACH	1	\$ 496.28	\$ 496.28
15	611	98720	INLET, NO. 2-8	EACH	1	\$ 6,454.50	\$ 6,454.50
TRAFFIC CONTROL							
16	642	00100	EDGE LINE, 4", TYPE I	MILE	0.45	\$ 1,152.39	\$ 521.10
17	642	00200	LANE LINE, 4", TYPE I	MILE	0.45	\$ 687.93	\$ 311.08
18	642	00300	CENTER LINE, TYPE I	MILE	0.23	\$ 3,055.77	\$ 690.90
19	642	30030	REMOVAL OF PAVEMENT MARKING	MILE	1.13	\$ 4,733.63	\$ 5,351.28
MAINTENANCE OF TRAFFIC							
20	614	12380	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (UNIDIRECTIONAL)	EACH	2	\$ 2,995.62	\$ 5,991.25
21	614	21200	WORK ZONE CENTER LINE, CLASS I, 740.06, TYPE I	MILE	0.31	\$ 16,608.62	\$ 5,070.00
22	614	22200	WORK ZONE EDGE LINE, CLASS I, 740.06, TYPE I	MILE	0.45	\$ 8,726.77	\$ 3,946.18
23	614	24400	WORK ZONE DOTTED LINE, CLASS I, 4", 740.06, TYPE I	FT	468	\$ 1.82	\$ 851.84
24	622	41100	PORTABLE BARRIER, UNANCHORED	FT	300	\$ 42.34	\$ 12,693.56
25	626	00102	BARRIER REFLECTOR, TYPE 1, BIDIRECTIONAL	EACH	6	\$ 13.55	\$ 81.27
STRUCTURE OVER 20 FT SPAN							
26	202	11203	PORTIONS OF STRUCTURE REMOVED, OVER 20 FT SPAN, AS PER PLAN	LS	1	\$ 22,062.57	\$ 22,062.57
27	509	20001	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN	LB	11527	\$ 2.35	\$ 27,081.78
28	511	34410	CLASS QC2 CONCRETE, SUPERSTRUCTURE	CY	20	\$ 2,004.85	\$ 39,341.83
29	511	34444	CLASS QC2 CONCRETE, BRIDGE DECK	CY	6	\$ 3,028.71	\$ 17,738.75
30	511	45710	CLASS QC1 CONCRETE, ABUTMENT	CY	51	\$ 1,036.33	\$ 53,232.23
31	512	10100	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	SY	902	\$ 26.73	\$ 24,120.50
32	516	11211	STRUCTURAL EXPANSION JOINT INCLUDING ELASTOMERIC STRIP SEAL, AS PER PLAN	FT	150	\$ 654.00	\$ 98,204.00
33	607	39911	VANDAL PROTECTION FENCE, 8' STRAIGHT, COATED FABRIC, AS PER PLAN	FT	256	\$ 113.52	\$ 29,013.89
34	622	25001	CONCRETE BARRIER END SECTION, TYPE D, AS PER PLAN	EACH	4	\$ 4,454.91	\$ 17,819.64
35	844	10000	CONCRETE PATCHING WITH GALVANIC ANODE PROTECTION	SF	2558	\$ 109.25	\$ 279,458.60
INCIDENTALS							
36	614	11000	MAINTAINING TRAFFIC	LS	1	\$ 19,363.50	\$ 19,363.50
37	623	10000	CONSTRUCTION LAYOUT STAKES AND SURVEYING	LS	1	\$ 6,454.50	\$ 6,454.50
38	624	10000	MOBILIZATION	LS	1	\$ 12,909.00	\$ 12,909.00

Sub Total =		\$ 801,270.00
Contingencies =	10.00%	\$ 80,130.00
Construction Total =		\$ 881,400.00
Inspection =		\$ 20,100.00
CSX Agreement =		\$ 60,500.00
Grand Total =		\$ 962,000.00

CERTIFICATION

I hereby certify the above estimate to be realistic based on the level of detail currently available for this project; in evidence whereof, I have set my signature and seal as of this date.

Richard G. Splawinski

Richard G. Splawinski
Ohio Engineer's License #56632

Date *8-09-22*



This spreadsheet contains formulas to make a weighted useful life calculation. Additional items can be added as necessary to Column A.

Wagner Ford Road, MOT-CR218-1.00, Bridge Rehabilitation

Weighted Useful Life & Design Service Capacity Calculations

Major Component	Cost (\$1,000)	Portion Repair / Replacement (%)	Repair / Replace Product	Useful Life (Years)	Useful Life Product
Full-depth Road Construction w/ drainage				25	
Full-depth Road Construction w/o drainage				25	
Partial-depth Road Construction w/ drainage				15	
Partial-depth Road Construction w/o drainage	204.9	100	20490	15	3073.5
Storm Sewers	7.6	100	760	40	304
Sanitary Sewers				40	
Water Lines				40	
Bridges	668.9	100	66890	75	50167.5
Pumps, Lift Stations				15	
Sidewalks				25	
Bicycle Facilities				7	
Totals	881.4		88140		53545

Weighted Useful Life: 60.7 Years

Design Service Capacity (Project Application, Section 2.0):

Portion Repair / Replace 100 %
 Portion New / Expansion %



Richard G. Splawinski
 8-09-22

OHIO PUBLIC WORKS COMMISSION

DISTRICT 4

Round 2022-2023 Supplemental Questionnaire

Applicant: Montgomery County Engineer

Project Title: Wagner Ford Road Bridge Rehabilitation, CR218-1.00

Application Summary:

Briefly describe the project:

The proposed bridge rehabilitation project is located on Wagner Ford Road between Webster Street and Chuck Wagner Lane, where Wagner Ford Road spans the CSX Railroad. Substructure rehabilitation work to be performed includes removal of spalling/deteriorated concrete, replacement of corroded reinforcing steel, cleaning of remaining exposed reinforcing, concrete patching with galvanic anode protection, and sealing of exposed surfaces with epoxy-urethane sealer. Superstructure rehabilitation work will include replacing strip seal expansion joints and adding pedestrian fencing along the existing parapets in accordance with CSX design standards. Approach guardrail and associated end anchor and bridge terminal assemblies will be replaced, and damaged drainage inlets will be reconstructed.

Priority:

Is this application your priority project? (Circle One)	
Yes <input type="radio"/>	No <input checked="" type="radio"/>

Generation of Revenue:

Will new user fees or assessments be assessed as part of this project? (Circle One)	
Yes <input type="radio"/>	No <input checked="" type="radio"/>
What will the new user fees or assessments be used for?	

Additional Funding:

Will OPWC match, in part, a committed grant or loan? (Circle One)	
Yes <input type="radio"/>	No <input checked="" type="radio"/>
If no, was the project submitted to an appropriate agency for funding, but denied due to lack of funding? (Circle One)	
Yes – Appropriate Documentation Attached <input checked="" type="radio"/>	No <input type="radio"/>

Readiness of Project:

Will this project be <u>substantially</u> underway on or before June 1, 2024? (Circle One)	
Yes <input checked="" type="radio"/>	No <input type="radio"/>

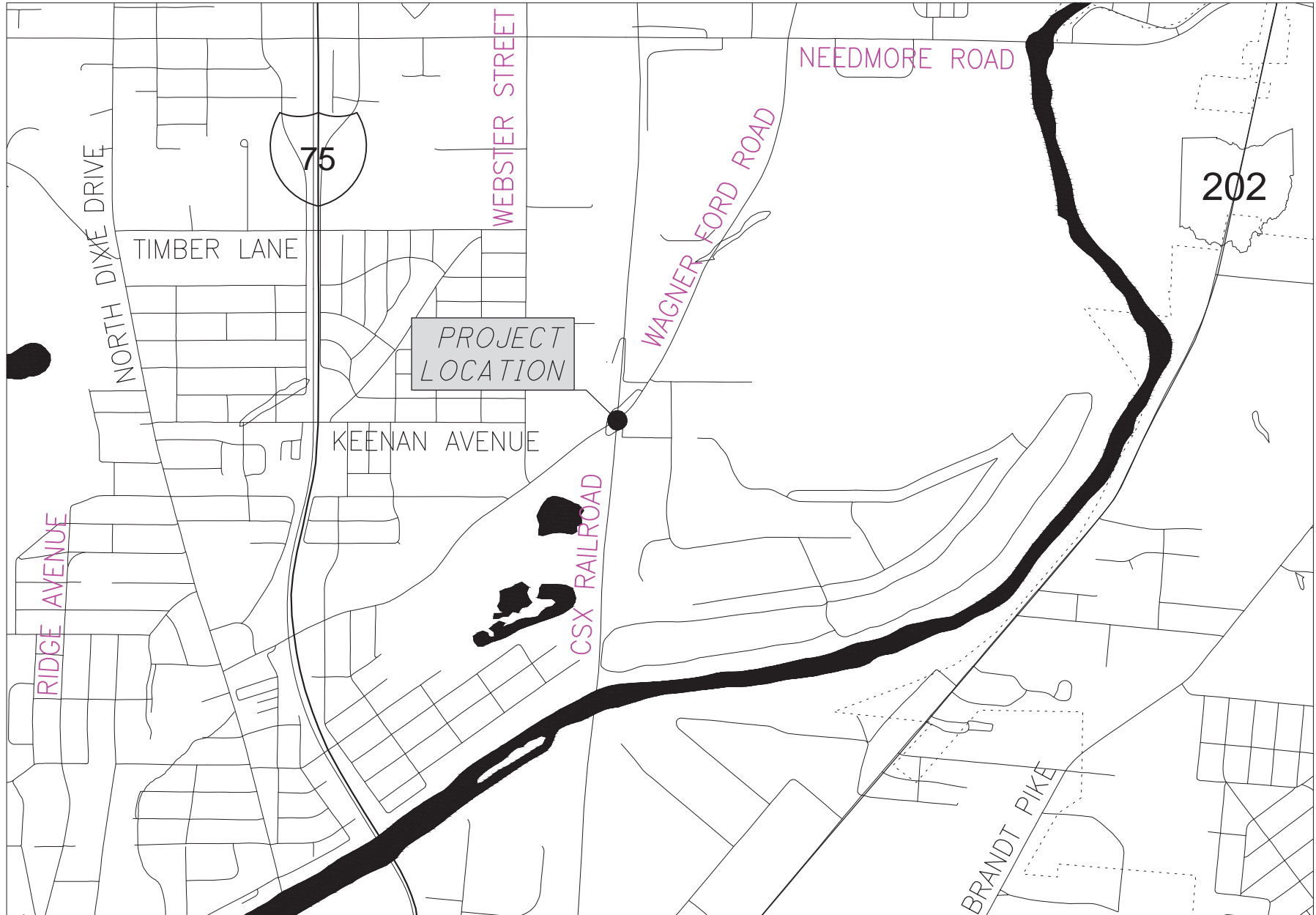
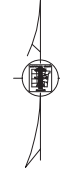
Health & Safety:

Describe the specific health or safety issue being addressed by this project. What deficiency or condition is causing the health or safety issue?
<p>The bridge inspection conducted in August 2021 shows a General Appraisal of 5 for this structure, with the poor condition of the substructure being the driving factor. Severe concrete cracking, delamination, spalling, and exposed and debonded reinforcing steel are present on the faces of the abutment breastwalls, beam seats, and backwalls. At several beam seat locations, spalling has begun to undermine the bearing support area and in one case has exposed the bearing anchor rods. Continued cracking, spalling, and deterioration of the beam seats beneath the bearings could ultimately jeopardize the support of the superstructure. Additional concrete spalling from the faces of the abutments could impact the safety of CSX railroad operations either directly or through the increasing frequency of maintenance required within the operating envelope of the railroad.</p> <p>Addressing the condition of the approach guardrail and drainage inlets will extend the infrastructure service life and also improve the safety of the traveling public.</p>

Other Factors

What other factors exist that make this project more important than other like projects?

WAGNER FORD ROAD, MOT-CR218-1.00 BRIDGE REHABILITATION LOCATION MAP



WAGNER FORD ROAD, MOT-CR218-1.00
BRIDGE REHABILITATION
CONDITION STATE OBSERVATIONS

OPWC FY23 DISTRICT 4
APPLICATION



Profile View of the Wagner Ford Road Bridge over the CSX Railroad as seen from the North Looking South

WAGNER FORD ROAD, MOT-CR218-1.00
BRIDGE REHABILITATION

OPWC FY23 DISTRICT 4
APPLICATION



Southwest Drainage Inlet



West/Rear Expansion Joint



East/Forward Expansion Joint

WAGNER FORD ROAD, MOT-CR218-1.00
BRIDGE REHABILITATION

OPWC FY23 DISTRICT 4
APPLICATION



East/Forward Abutment Backwall

Areas marked indicate delamination along the face of the backwall. Previously observed spalls have been patched with cold-patch or asphalt since the last inspection.

WAGNER FORD ROAD, MOT-CR218-1.00
BRIDGE REHABILITATION

OPWC FY23 DISTRICT 4
APPLICATION



West/Rear Beam Seat Showing the Exposed Anchor Rod and Loss of Bearing Area Beneath Beam-2

WAGNER FORD ROAD, MOT-CR218-1.00
BRIDGE REHABILITATION

OPWC FY23 DISTRICT 4
APPLICATION



Additional Locations along the West/Rear Beam Seat

Cracking, delamination, spalling, and exposed rebar is prevalent along the whole west/rear beam seat and will likely continue to worsen like the area under Beam-2 if left unaddressed.

WAGNER FORD ROAD, MOT-CR218-1.00
BRIDGE REHABILITATION

OPWC FY23 DISTRICT 4
APPLICATION

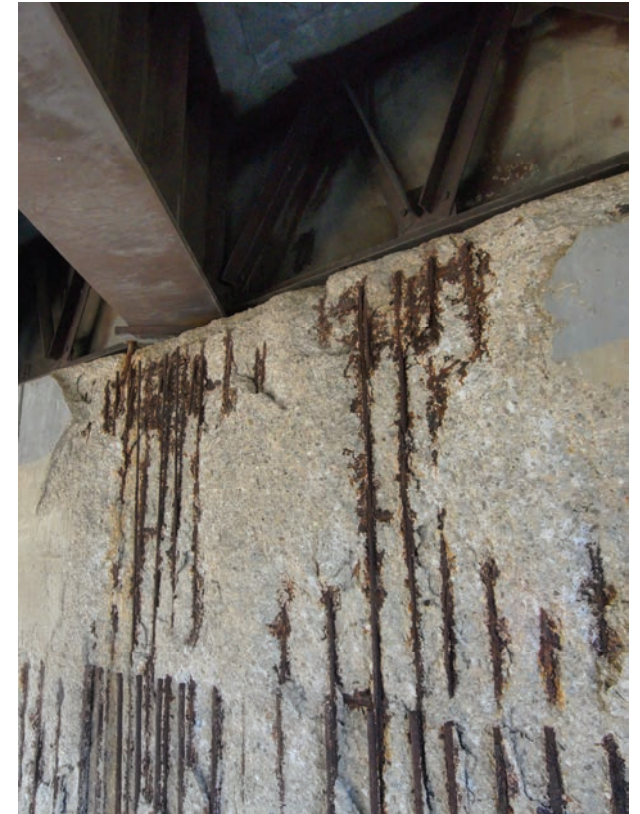


East/Forward Beam Seat

While not as severe as the west/rear abutment beam seat, cracking, delamination, spalling, and exposed reinforcing steel can be observed on the east/forward bearing area.

WAGNER FORD ROAD, MOT-CR218-1.00
BRIDGE REHABILITATION

OPWC FY23 DISTRICT 4
APPLICATION



West/Rear Abutment Wall

Extensive spalling up to 4" deep for approximately 45% of the total surface has been noted along with exposed vertical and horizontal rebar.

WAGNER FORD ROAD, MOT-CR218-1.00
BRIDGE REHABILITATION

OPWC FY23 DISTRICT 4
APPLICATION



West/Rear Abutment Wall Cont.

Minor locations of spalling present in other areas which are likely to propagate if left unaddressed.

WAGNER FORD ROAD, MOT-CR218-1.00
BRIDGE REHABILITATION

OPWC FY23 DISTRICT 4
APPLICATION



East/Forward Abutment Wall

Advanced spalling like that observed on the west/rear abutment is also present on the east/forward abutment wall totaling up to 40% of the face. Similarly having vertical and horizontal rebar exposed where loss of section and debonding can be seen.

Ohio Bridge Inspection Summary Report

MOT-C0218-0100 (5736102)

2: District 07 33922 - HARRISON TWP (MOT county)
 21: Major Maint A/B 02 - County Highway Agency /
 225 Routine Main A/B 02 - County Highway Agency /
 221 Inspection A/B 02 - County Highway Agency /
 220: Inv. Location HAR

5A: Inventory Route 1 C0218
 7: Facility On Wagner Ford C218
 6: Feature Ints CSX Railroad
 9: Location .9 MI NE OF I75

Condition

58: Deck 7 - Good Condition
 58.01 Wearing Surface 7 - Good (1% distress)
 58.02 Joint 7- Good (no leaking)
59: Superstructure 7 - Good Condition
 59.01 Paint & PCS 7 - Good (1-5% corr.)
60: Substructure 5 - Fair Condition
61: Channel N
61.01 Scour N - Not Applicable
62: Culverts N - Not Applicable
67.01 GA 5

Structure Type

43: Bridge Type 3 - Steel
 02 - Stringer/Multi-beam or Girder
 N- Not Applicable
 45: Spans Main / Approach 1 / 0
 107: Deck Type 1 - Concrete Cast-in-Place
 408: Composite Deck Y - Composite Construction
 414A Joint Type 1 7 - Steel Reinforced Elastomeric
 414B: Joint Type 2 N - None
 108A: Wearing Surface 3 - Latex Concrete or similar additive
 N- Not Applicable

Appraisal

Sufficiency Rating 68.2 SD/FO 2 - FO
 36: Rail, Tr, Gd, Term Std 1 1 1 1
 72: Approach Alignment 8 - Equal to present desirable criteria
 113: Scour Critical N - Not over waterway
 71: Waterway Adequacy N - Not Applicable

422: WS Date 01/01/1991
 423: WS Thick (in) 1.0
 482: Protective Coating 3 - Paint System A
 483: PCS Date 07/01/1991
 453: Bearing Type 1 C - Elastomeric (laminated)
 455: Bearing Type 2 N - None
 528: Foundn: Abut Fwd 4 - Spread Footing
 533: Foundn: Abut Rear 4 - Spread Footing
 536: Foundn: Pier 1 N - None (Such as most Culverts)
 539: Foundn: Pier 2 N - None (Such as most Culverts)

Geometric

48: Max Span Length (ft) 121.0
 49: Structure Length (ft) 128.0
 52: Deck Width, Out-To-Out (ft) 58.5
 424: Deck Area (sf) 7488
 32: Appr Roadway Width (ft) 45.0
 51: Road Width, Curb-Curb (ft) 45.0
 50A: Curb/SW Width: Left (ft) 0
 50A: Curb/SW Width: Right (ft) 0
 34: Skew (deg) 35
 33: Bridge Median 0 - No median
 54B: Min Vert Underclearance (ft) 22.5
 336A: Min Vert Clrnce IR Cardinal (ft) 99
 336B: Min V Clr IR Non-Cardinal (ft) 0
 578: Culvert Length (ft) 0

Age and Service

27: Year Built/ 106 Rehab 1965 / 1991
 42A: Service On 1 - Highway
 42B: Service Under 2 - Railroad
 28A: Lanes on 04
 28B: Lanes Under 00
 19: Bypass Length 2
 29: ADT 8338
 109: % Trucks (%) 1

Load Posting

41: Op/Post/Closed A - Open
 70: Posting 5 - Equal to or above legal loads
 70.01: Date
 70.02: Sign Type
 734: Percent Legal (%) 150
 704: Analysis Date 02/14/2018
 63: Analysis Method 6 - Load Factor (LF) rating reported by rating factor (RF) method using MS18 loading.

Inspections

	Months	
90: Routine Insp.	12	08/03/2021
92A: FCM Insp.	N	0
92B: Dive Insp.	N	0
92C: Special Insp.	N	0
92D: UBIT Insp.	N	0
92E: Drone Insp.	N	0

Inspector Schaub,Mark

Inspector: Mark Schaub
Inspection Date: 08/03/2021

Structure Number: 5736102
Facility Carried: Wagner Ford C218

Bridge Inspection Report

Element Inspection

ODOT District: 07

MOT-C0218-0100 __(5736102)

Major Maint: 02 - County Highway Agency

Facility Carried: Wagner Ford C218

Traffic On: 1 - Highway

Date Built: 07/01/1965

Rehab Date: 01/01/1991

Routine Maint: 02 - County Highway Agency

Feature Inters: CSX Railroad

Traffic Under: 2 - Railroad

Insp: 02 - County Highway

Resp A: Agency

FIPS Code: 33922 - HARRISON TWP (MOT county)

Location: HAR

.9 MI NE OF I75

Insp

Resp B:

Inspector

Schaub,Mark

Inspection Date

08/03/2021

Reviewer Shields,David

Inspector Comments - Deck and Approach

Deck

Floor/Slab (SF)

- Minor transverse cracks with efflo.
- Stained with soot underneath from train exhaust.

Bridge Wearing Surface (SF)

- Popouts, missing reflectors.
- Would benefit from sealing with SRS.

Bridge Railing (LF)

- Scaling.

Expansion Joint (LF)

- Joint width varies from end to end of both joints, structure on a 35 degree skew.
- Expansion joint seal full of soil with vegetation growing, recommended to clean out.

Approach

Approach Wearing Surface (EA)

Approach Slab (SF)

- Asphalt breaking up at the expansion joint, top of backwall cracking, popouts, spalling, recommended to repair with hard material

Approach Embankment (EA)

- Vegetation overhanging rail, recommend to cut.

Approach Guardrail (EA)

- Minor damage to SE approach rail, still functional.
- Damage to Northwest approach rail - erosion around approach posts next to bridge.
- Many areas of impact damage at all four approaches.

Inspector Comments - General Appraisal

Superstructure

Bearing Devices (EA)

- Loss of bearing area at West abutment, Beam-2, bearing overhanging abutment seat approx. 6" with one exposed anchor pin.

Protective Coating System (LF)

- A-588 weathering steel.

Substructure

Abutment Walls (LF)

- Many exposed, adjacent vertical and horizontal rebar with L.O.S. and debonded on both walls.

East Abutment

- Approximately 40% of face of entire wall has deterioration.

- Spall at North end near top 6'H x 4'W x 2"D w/ 8 exposed rebar.

- Vertical crack 2'W x 2"D at North 1/4 full height of abutment, from grade to seat under B-3.

- Spall near C/L w/ delamination at top 1/2 of abutment 15'H x 6'W x 2"D w/ 4 exposed vertical rebars, extends to seat B-5.

- Spall area at South end 20'H x 20'W x 4"D many vertical & (9) horizontal rebars with L.O.S., spalling extends near seat of B-7 & B-8.

West Abutment

- Approximately 45% of face of entire wall has deterioration.

- Spall at South end 20'H x 16'W x 4"D, many exposed vertical and (10) horizontal rebar, extensive corrosion/L.O.S. to rebar, spalling extends to near seat of B-7 & B-8.

- Delam. 2'H x 2'W near seat under B-6 - Spall near C/L 20'H x 8'W x 4"D, many exposed vertical rebar, spalling extends to seat under B-4, spalled 4"D under B-4.

- Spall and delam. area near top 8'H x 4'W x 2"D w/ exposed vertical rebar under B-3 bearing area.

- Spall 12'H x 12'W x 4"D at North end under bearings of BM's 1 & 2, loss of bearing area under B-2, many exposed corroded rebar.

- Many debonded vertical rebars on East and West abutments.

*** This bridge before rehab had a box beam superstructure, old photos indicate heavy saturation, salt, efflo. on both abutments resulting in current deterioration***

Abutment Caps (LF)

See Abutment Comments

Backwalls (LF)

- Both backwall tops heavily spalled.

East Backwall

- Delaminated area area near West end, , 3'H x 3'W.
- Cracks, popouts, and small spalls along the top of both backwalls.
- Spall on top, North bound lane, 3'L x 1'W x 4"D.
- Spall on top, South bound lane, 4'L x 4"W x 2"D.

South Backwall

- Spall on top, North bound lane, 2'L x 1'W x 4"D.
- All spalls on top of both backwalls are patched with cold patch or asphalt at time of 2020 inspection, recommend to repair both tops of backwalls with hard material.

Wingwalls (EA)

- Southeast wingwall cracking, spalling, deterioration on South most corner, 2"W x 4'H.

Note - *Abutment rehab scheduled for 2025*

Culvert

Inspector Comments - Waterway

Waterway Adequacy

Channel

Scour Critical

Inspector: Mark Schaub
Inspection Date: 08/03/2021

Structure Number: 5736102
Facility Carried: Wagner Ford C218

Bridge Inspection Report

Pictures



PHOTO 1

Description



PHOTO 2

Description

Inspector: Mark Schaub
Inspection Date: 08/03/2021

Structure Number: 5736102
Facility Carried: Wagner Ford C218

Bridge Inspection Report

Pictures



PHOTO 3
Description



PHOTO 4
Description

Inspector: Mark Schaub
Inspection Date: 08/03/2021

Structure Number: 5736102
Facility Carried: Wagner Ford C218

Bridge Inspection Report

Pictures



PHOTO 5

Description



PHOTO 6

Description

Inspector: Mark Schaub
Inspection Date: 08/03/2021

Structure Number: 5736102
Facility Carried: Wagner Ford C218

Bridge Inspection Report

Pictures



PHOTO 7

Description



PHOTO 8

Description

Montgomery County Engineer's Office Traffic Department

Location : Wagner Ford Road
 Cross Street : 525' E of Webster Street
 By : KRL

Site: 22 641
 4/3/2022
 Sunday

24 Hour Volume

Interval Start	Eastbound	Westbound	Combined	Interval Start	Eastbound	Westbound	Combined	
8:00 AM	40	192	232	8:00 PM	50	187	237	
8:15 AM	48		48	8:15 PM	46		46	
8:30 AM	52		52	8:30 PM	49		49	
8:45 AM	52		52	8:45 PM	42		42	
9:00 AM	54	222	276	9:00 PM	36	137	173	
9:15 AM	58		58	9:15 PM	36		36	
9:30 AM	54		54	9:30 PM	36		36	
9:45 AM	56		56	9:45 PM	29		29	
10:00 AM	46	188	234	10:00 PM	33	110	143	
10:15 AM	46		46	10:15 PM	20		20	
10:30 AM	45		45	10:30 PM	30		30	
10:45 AM	51		51	10:45 PM	27		27	
11:00 AM	58	244	302	11:00 PM	18	91	109	
11:15 AM	65		65	11:15 PM	22		22	
11:30 AM	60		60	11:30 PM	31		31	
11:45 AM	61		61	11:45 PM	20		20	
12:00 PM	75	267	342	4/4/2022 12:00 AM	17	45	62	
12:15 PM	67		67	12:15 AM	9		9	
12:30 PM	70		70	12:30 AM	6		6	
12:45 PM	55		55	12:45 AM	13		13	
1:00 PM	59	211	270	1:00 AM	9	34	43	
1:15 PM	56		56	1:15 AM	6		6	
1:30 PM	51		51	1:30 AM	10		10	
1:45 PM	45		45	1:45 AM	9		9	
2:00 PM	63	262	325	2:00 AM	6	26	32	
2:15 PM	67		67	2:15 AM	4		4	
2:30 PM	67		67	2:30 AM	10		10	
2:45 PM	65		65	2:45 AM	6		6	
3:00 PM	78	333	411	3:00 AM	6	24	30	
3:15 PM	85		85	3:15 AM	5		5	
3:30 PM	71		71	3:30 AM	5		5	
3:45 PM	99		99	3:45 AM	8		8	
4:00 PM	109	377	486	4:00 AM	7	18	25	
4:15 PM	98		98	4:15 AM	4		4	
4:30 PM	85		85	4:30 AM	4		4	
4:45 PM	85		85	4:45 AM	3		3	
5:00 PM	94	454	548	5:00 AM	9	36	45	
5:15 PM	133		133	5:15 AM	5		5	
5:30 PM	123		123	5:30 AM	9		9	
5:45 PM	104		104	5:45 AM	13		13	
6:00 PM	96	296	392	6:00 AM	16	90	106	
6:15 PM	62		62	6:15 AM	21		21	
6:30 PM	59		59	6:30 AM	25		25	
6:45 PM	79		79	6:45 AM	28		28	
7:00 PM	47	185	232	7:00 AM	44	185	229	
7:15 PM	57		57	7:15 AM	50		50	
7:30 PM	45		45	7:30 AM	40		40	
7:45 PM	36		36	7:45 AM	51		51	

Volume Totals			
	Eastbound	Westbound	Combined
12:00 AM - 12:00 PM	1304 (45.3%)	1576 (54.7%)	2880
12:00 PM - 12:00 AM	2910 (53.7%)	2507 (46.3%)	5417
24 Hours	4214 (50.8%)	4083 (49.2%)	8297
Peak Hours			
12:00 AM - 12:00 PM			
	Eastbound	Westbound	Combined
Started			
11:00 AM		8:00 AM	8:00 AM
Volume	244	269	461
Factor	0.94	0.71	0.85
12:00 PM - 12:00 AM			
	Eastbound	Westbound	Combined
Started			
5:15 PM		4:00 PM	5:00 PM
Volume	456	302	729
Factor	0.86	0.85	0.93



County Engineers

Association of Ohio

6500 Busch Blvd., Suite 100 • Columbus, Ohio 43229-1738
(614) 221-0707 • Fax (614) 221-5761 • www.ceao.org

July 19, 2021

Paul W. Gruner, P.E., P.S.
Montgomery County Engineer
451 W. Third Street
Dayton, Ohio 45422-1260

Re: MOT-CR 218-1.00 (SFN 5736102) Wagner Ford Road Bridge Rehabilitation

Dear Mr. Gruner:

The referenced bridge is on the updated list of bridges eligible for LBR funding consideration this year with a rank score of 111.8. The ranking scores from that list were used to determine which of the approximately \$75 million in new applications were selected for funding. Priority funding consideration was given to the first \$10 million of target bridges having a GA of 4 or less in counties with bridge deck area deficiencies greater than the statewide average. Priority was next given to counties that are guaranteed a bridge based on the four-year rule, and this left no funding to allocate to additional projects.

We regret to inform you that the projected LBR funding available for FY 2027 was fully committed before the above referenced project was reached. Please consider submitting a new application for this bridge next year when the process is repeated if you desire FY 2028 funding consideration.

If you have any questions or wish to discuss this further, please contact this office.

Sincerely,

Michele Risko
CSTP/LBR Program Manager

cc: File